



Early Journal Content on JSTOR, Free to Anyone in the World

This article is one of nearly 500,000 scholarly works digitized and made freely available to everyone in the world by JSTOR.

Known as the Early Journal Content, this set of works include research articles, news, letters, and other writings published in more than 200 of the oldest leading academic journals. The works date from the mid-seventeenth to the early twentieth centuries.

We encourage people to read and share the Early Journal Content openly and to tell others that this resource exists. People may post this content online or redistribute in any way for non-commercial purposes.

Read more about Early Journal Content at <http://about.jstor.org/participate-jstor/individuals/early-journal-content>.

JSTOR is a digital library of academic journals, books, and primary source objects. JSTOR helps people discover, use, and build upon a wide range of content through a powerful research and teaching platform, and preserves this content for future generations. JSTOR is part of ITHAKA, a not-for-profit organization that also includes Ithaka S+R and Portico. For more information about JSTOR, please contact support@jstor.org.

author's interpretation of those facts? Is it essay, history or fiction? Is it unprejudiced? Is it easy to read? Does difficult reading imply dullness?⁸ Sometimes a book which is hard to read proves interesting after all. And it is quite true that students often enjoy an assignment which they would never undertake to read voluntarily. Finally, how does the book rank among others of its type? While the class is studying this phase of the work, it is well to have a criticism of the text. Pupils should learn that we need not agree with it entirely, or believe its statements too implicitly.

Assignments to illustrate the historical method should be taken up in class. The teacher will distribute copies of sources with prepared questions. When the class assembles these may be discussed, and the method of making histories brought out. Several class periods may be devoted to the work, and assignments should be for the class. Finally a piece of written work may be required. A local instance may be suggestive. We have a history of Cecil County, Maryland, written by George Johnston about 1880. A few years ago an attempt was made to revise it. Unfortunately for the history, the editor died before the task was completed. But the pupils living in the community know what efforts were made in the neighborhood to collect old family and church records, pictures of antiques and of old houses, names of farms, etc. This is a concrete instance, and brings the matter home. Taking this editor's experience as a beginner, we can show how other historians build up their work; why there must be gaps in history where there are no sources; why many writers base their histories upon reliable secondary works; how to judge these secondary works; what constitutes a good historian; the names of the best histories, their authors, and the main facts in their lives. Something of this kind was done under the guidance of our primary supervisor last year. She asked several schools to prepare a brief local history of the district in which the school was located, and the result was published in the county paper. Such work is practical and helpful. This study of local history is one of the best methods of arousing interest, and even if some of it is merely tradition, one can separate the false from the true, and thus again bring home a point in historical method. When there is little that may be termed "collateral reading," the teacher may take the pupils to an historical place in the community, always having them note certain points, or answer certain definite questions. We are fortunate enough to have several excellent Maryland histories, a history of the county, and sev-

eral illustrative books. Other counties may not have the material at hand; but they can always find *something* interesting in local history.

(TO BE CONTINUED)

VITALIZING THE HISTORY LESSON

By SYLVIA LOUISE LATSHAW

Chapel Hill, N. C.

THE eleventh grade history class in the Chapel Hill High School found the treatment of the Constitutional Convention of 1787, as given in their text-book, both difficult and uninteresting.

To vitalize and make interesting the study and to develop appreciation of the work of the framers of our fundamental law the class decided to hold a constitutional convention. It was the teacher's aim to have the class discover, in part at least, how difficult it was to create a national government from thirteen jealous States. Copies of the "Proceedings of the Constitutional Convention,"* by James Madison, were secured and after looking them over we decided to debate only the Virginia Plan and the New Jersey Plan because from these plans the constitution developed.

The Virginia Plan provided for a Legislature of two houses. The members of the lower house were to be elected by the voters of the States and representation in this body was to be apportioned according to the wealth and population of the States. The lower house was to choose the upper house. Small States would thus have few representatives in the lower house and possibly none in the upper. Another important provision of the Virginia Plan was that Congress could veto any bill passed by a State which in the opinion of Congress did not accord with the national constitution or laws.

The New Jersey Plan agreed with the Virginia Plan in many particulars but it differed in this essential, that under it the members of Congress were to represent the individual States, and each State was to be equally represented in the national legislative body.

The Connecticut Compromise under which features of the two plans were combined was the plan finally adopted by the Convention. Through this "Great Compromise" our federal government was established.

After we had decided on the part of the debate we meant to reproduce, a list was made of the speakers. The representatives of the States were kept together. To each member of the class one representative was assigned for whose remarks he was responsible. The

⁸ Johnson. *The Teaching of History*, p. 334.

* Copies of this book can be borrowed from the University Library. At least one book is needed for every five pupils.

students were shown how to use the index in getting up their speeches. Schedules were also made and posted a day or two in advance of the debates, in which the names of all the speakers were listed in order, with a word or two as to how they stood on the proposition under discussion. This schedule was used as a guide by the person occupying the chair. It was convenient in prompting students who did not know just when they were to speak.

Some of the members by States were: George Mason, Edmund Randolph, and James Madison of Virginia; Patterson and Houston of New Jersey; Roger Sherman, and Ellsworth of Connecticut; Hamilton of New York; Pinckney of South Carolina; Gouverneur Morris of Pennsylvania; and Rufus King of Massachusetts.

When the day set for our first debate began Mr. Gorham, of Massachusetts, took the chair and acted as moderator while Mr. Randolph, acting for the Virginia delegation, read the Virginia Plan. Debate began and was in spirited progress when interrupted by the

arrival of delegates from distant States. James Madison was there, taking copious notes but saying very little. When a vote was called for, each state delegation voted as a unit. For several days we debated, as the members of the Convention did, the advantages and disadvantages of the Virginia Plan. The "small-states" men spoke often and freely of their determination not to be swallowed up by Virginia and Massachusetts.

When the last day's debate was over and the Connecticut Compromise carried by a scant majority we felt that we had won a real victory. The phrases of the Constitution had been invested with a new meaning.

We now see Article I, Sections 1, 2, and 3 against a background brilliant with the figures of intelligent patriotic men whose thoughts we have studied, whose arguments we have reproduced, and whose viewpoint we have shared. To an extent we have partaken of their task and have helped to frame the Constitution of the United States of America.

WHY ARE TIDES INVERTED?

By PROFESSOR A. H. PATTERSON
University of North Carolina

QUITE recently my attention was called, not for the first time, to the very unsatisfactory treatment of the subject of the tides in the average text-book used in the schools, whether in Astronomy, Physical Geography, or Geology. A puzzled teacher came to me to get some help on the subject, and as a result of our talk I took occasion to look over a number of texts, such as Davis, Gilbert and Brigham, Redway, Dryer, Hopkins, and others, to see whether the treatment of the tides showed any improvement in recent years. Not one of these mentioned the "inversion" of the tides, by which term is meant *the occurrence of high tides where low tides would be expected by theory, and vice versa*.

I have often wondered how the teachers in our tide-water schools get by with the usual explanation, which calls for high tide under the moon, when every observant boy knows that *low* tide follows the moon. But the teachers are only quoting the text-book, and are not to be blamed.

The authors of the texts, however, cannot be excused so easily, for there is plenty of literature on the subject. The articles on tides in the encyclopedias are full and explicit, and there are various books on the subject—for example, "The Tides," by G. H. Darwin—which give a correct and interesting explanation of the matter.

First, let us consider the Static, or Equilibrium Theory of the tides. Suppose a rod 250,000 miles long were stuck through the center of the earth and the center of the moon, leaving them just as far apart as at present. The rod would then extend entirely through the earth and the moon, and stick out a little at each end. The earth is of course supposed to stop rotating on its axis as it does now, or else it would break our supposed rod, but the earth and moon are both to keep up their monthly revolution about the center of gravity of the earth-moon system, as at present.

This center of gravity is on our supposed rod, 3,000 miles from the center of the earth, so that while the moon would swing around every month in a circle 236,000 miles in radius, the center of the earth would swing around in a circle 3,000 miles in radius. Now the ocean on the side of the earth away from the moon is 4,000 miles further from the center of gravity of the system than is the center of the earth, so that the water of this ocean will travel around every month in a circle 7,000 miles in radius, and will be subjected to a centrifugal force which will heap up the water in a tidal wave. This is why a tide is raised on the side of the earth away from the moon.

Now how is it raised on the side of the earth toward the moon? The attraction of the moon on the